

IN THE DRAWINGS:

A new replacement Fig. 1A and a new replacement Fig. 2 are being submitted with this Amendment to overcome the objections with regard to the drawings in the previous Office Action. In particular, the new Fig. 1A and Fig. 2 show the sleeve as schematically represented by the element with numeral 99. Applicant has marked the changes in Fig. 1A and Fig. 2 with circles to highlight the changes which have been added to the original drawings of Fig. 1A and Fig. 2. As can be seen from the original Fig. 2, the element inside the coupling 20 already included but did not label the sleeve 99 as claimed. Similarly, the sleeve 99 is schematically represented in the Fig. 1A but has not been labeled as element 99 due to a typographical error. Applicant requests that the Examiner approve the replacement drawings of Fig. 1A and Fig. 2 as submitted.

### REMARKS

Claims 1 - 20 are in this application and are presented for reconsideration. By this amendment, Applicant has amended claims 1-12 and added new claims 13-20 and made minor changes to the drawing and the abstract to improve the clarity and the style of this application. Specifically, Applicant has made changes to the independent claim 1 and made the dependent claim 2 into a second independent claim to highlight the combination of features of the invention. The amended independent claim 1 is drawn to Figures 2 and 3 and the amended independent claim 2 is draw to Figure 1.

Further, the new claim 13 is submitted which includes the features of the present invention but in a different form. The Office Action dated May 31, 2005 states that the reply submitted on March 11, 2005 is not fully responsive to the prior Office Action dated November 2, 2004 and the Office Communication dated December 14, 2004 because new claims 13 - 20 have been added without an explanation of how they define over the prior art of record.

Applicant directs the Patent Office to the prior response dated March 11, 2005 where, in the pertinent part, it states that "the new claim 13 is submitted which includes the features of the present invention but in a different form" (Page 9, lines 8 - 9). Claims 14 - 20 either directly or indirectly depend on the new claim 13 and also include the features of the present invention. The prior Remark section (reproduced below to assist examination of the Application) makes it clear that the prior art of record does not anticipate the present invention as claimed, because the prior art reference provides for an integrated handle bar extension and a master cylinder apparatus including a main body member with a connection interface formed integrally with the main body member.

The present invention as claimed in claims 13 - 20 includes the feature that the brake controlling apparatus includes a single monolithic handlebar rotatably connected to a steering stem of a bicycle and a fluid-operating pump enveloped inside the single monolithic bicycle handlebar, where the hydraulic circuit is connected to and actuated by the pump, and a brake is connected to the hydraulic circuit. Therefore, claims 13 - 20 also define over the prior art of record.

It is Applicant's position that the paragraph above adequately describes and defines the present invention over the prior art or record. If this explanation is unclear or the Patent Office still believes that the response is not fully responsive, Applicant requests that the Patent Office contact Applicant's representative at the number given below.

Favorable consideration of all outstanding claims is requested in view of the previously submitted remarks presented once more below.

#### DRAWINGS

The drawings have been objected to under 37 CFR 1.83(a) for failing to show the "sleeve" as claimed in claims 2 and 4.

Applicant submits herewith a corrected set of drawings of Figures 1A and Figure 2 which show the sleeve as represented by the numeral 99. The sleeve had been indicated previously in a schematic indication but had not been labeled. It should also be noted that the sleeve 2 is not a limiting feature of claims 2 and 4 but a part of the bike to which the claimed invention has to be attached. Therefore, Applicant has also amended the wording of claims 2 and 4 to change the "sleeve" to --a steering stem of the bike-- to clarify this point. Also, please

find a set of redacted pages of Figures 1A and 2 showing the additional labels circled to highlight the changes made to the drawings. Favorable consideration of the drawings Figures 1A and 2 is requested.

### SPECIFICATION

The abstract of the disclosure has been objected to because of the presence of the word "said". In addition, the Office Action also objected to the numerals and stated that numerals used in abstract should be used to identify all structural features or none at all.

Applicant submits herewith a substitute abstract to replace the abstract as originally filed. The substitute abstract reflects the suggested changes as pointed out in the Office Action.

The disclosure has also been objected to and the Office Action states that the specification appears to be a literal translation of the foreign document and suggested submission of a substitute specification.

Applicant has reviewed the specification, and Applicant believes the most serious grammatical error is in the paragraph on Page 3, starting on line 28. Applicant submits herewith a replacement paragraph for the grammatically incorrect paragraph. If there are other formalistic errors in the specification, Applicant requests that the Patent Office specify grammatical and idiomatic errors or give examples thereof.

The specification has also been objected to and a clarification has been requested for the meaning of the phrase "oil stuffing 72" and "counteracting 73" in the specification at page 4, line 12.

According to the present invention, as discussed in the present specification, an o-ring 72 having "oil stuffing" function is an o-ring gasket which, in the functioning of a bike brake assembly, cooperates to provide pressure to the oil. An o-ring having "counteracting" function is an o-ring gasket which bears a mechanical pressure in contacts with the spring 66, in opposition to the pressure exerted by the piston 6.

To clarify this issue, Applicant has amended the paragraph starting on page 3, line 28 and ending on page 4, line 2 by changing the word "allowing" on page 3, line 30 to 32 to -- to be fixed to --.

#### CLAIMS REJECTIONS - 35 USC § 112

Claims 2 and 4 have been rejected under 35 USC § 112, first paragraph, as failing to comply with the enablement requirement. Specifically, the Office Action states that the subject matter was not described in the specification in such a way to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention because the sleeve is not shown in the drawings.

As stated above, Applicant has enclosed herewith replacement sheets of drawings with Figures 1A and 2 where the sleeve has been schematically represented by the element with numeral 99. In addition, Applicant notes that a person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention would appreciate the present invention in view of the specification and drawings and would have no doubt on the technical meaning on the term "sleeve", as used in the context of the invention. That is, the term "sleeve" identifies the cylindrical body into which the steering stem, which is connected

through the lug to the handle bar, can rotate under the action of the handle bar. Therefore it is Applicant's position that the specification as disclosed originally complies with the enablement requirement to enable a person skilled in the art to make and/or use the invention.

Claims 1 and 2 have been rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. Specifically, the Office Action states that the "and the like" in claim 1, line 1 is unclear and the metes and bounds of "and the like" requires clarification. In addition, the Office Action also rejected claims 1 to 12 because the phrase "in particular" is considered to be a range within a range limitation due to its vagueness.

Applicant has amended claim 1 to remove the "and the like" and "in particular". Thus, Applicant has removed the obstacle of claims 1 and 2 being indefinite.

Claims 2 and 4 have been rejected because the "the sleeve" lacks antecedent basis.

In response, Applicant has amended claims 2 and 4 to remove the "sleeve" and introduce the steering stem of the bicycle properly establishing the antecedent basis with the word "a".

#### CLAIM REJECTIONS - 35 USC § 102

Claim 1 has been rejected under 35 USC § 102(b) as being anticipated by Andrus (U.S. Patent No. 6,502,675 B1, "Andrus '675", hereinafter).

It is Applicant's position that the Andrus '675 reference does not anticipate nor does it suggest the present invention as claimed. The Andrus '675 reference provides for an

integrated handle bar extension and master cylinder apparatus including a main body member with a connection interface which is formed integrally with the main body member of a motorcycle and has an elongated bore defining a first longitudinal axis (also known as known by a person skilled in the motorcycle art). A piston is disposed within the bore and slidable relative to the master cylinder unit along the first longitudinal axis. A trigger member is pivotably moveable relative to the master cylinder unit and is adapted on a first end to receive an actuation force and on a second end to cause relative movement between the master cylinder unit and the piston in response to the actuation force. A handle bar portion extends along said first longitudinal axis on a side of said main body member opposite from said connection interface.

#### INTEGRALLY UNITARY BICYCLE HANDLE BAR

The device of Andrus '675 reference is distinct from the claimed apparatus because the Andrus '675 reference shows a "handle bar extension" integrated with a cylinder apparatus including a pump for a motorcycle. In contrast, the present invention as claimed provides for an apparatus providing a pump within the handle bar for a bicycle.

Claim 2 has been rejected under 35 USC § 102 as being anticipated by Andrus '675.

The rejection turns to Andrus '675 reference for disclosing a sleeve at 54 and a lug, as broadly claimed, at 126 or 128.

Claim 2 as amended requires an apparatus for controlling a brake mounted on a bike where the apparatus includes a pump able to push fluid into a hydraulic circuit connected to the brake where the pump is held inside a lug connecting the handle bar to a steering stem of the

bicycle. The main highlight of this claim provides for a lug 3 connecting handle bar 2 with a sleeve of the bike, within which the lug, the brake pump is being held. Therefore, even if the reference of the Andrus '675 discloses a throttle assembly 126 and a clamp 128 which may be referred to as "lugs" (and this is highly debatable), the main feature of claim 2 is not anticipated by the Andrus '675 reference.

Furthermore, the handle bar extension of the Andrus '675 reference is arranged between the handle grip and the handle bar and therefore, it does not anticipate a bike lug connecting the handle bar to the steering stand. Thus, claim 2 is not anticipated by the Andrus '675 reference.

The dependent claims 4, 5, 11 and 12 depend on the independent claim 1 and any claims in between. Because claim 1 is not anticipated by Andrus '675 reference, it is Applicant's position that the dependent claims which also include the combination of features of the Andrus '675 reference, are also not anticipated nor suggested by the Andrus '675 reference.

#### CLAIM REJECTION - 35 USC § 103

Claim 3 has been rejected under 35 USC § 103(a) as being unpatentable over Andrus '675 reference in view of Modolo (U.S. Patent No. 4,771,649, "Modolo '649", hereinafter).

The rejection is based on the position that the Andrus '675 reference discloses a device that can be modified so that it can be actuated inside "the two arms" as broadly claimed of a raising type handle bar and it would have been obvious in view of the Modolo '649 reference to offer a more stream lined and aerodynamic setup. The Modolo '649 reference discloses a bicycle brake actuating device including a brake lever 21 hinged in such a way to turn around



an axis X substantially parallel to the supporting axis of a cyclists hand where the brake lever can be supported by two tabs placed on the hands supporting handle. A holding cavity 40 is preferably utilized to receive the transmission of the brake lever and the mechanism that is part of the actuating device. The teachings of the Modolo '649 reference are different from a situation in which the claimed apparatus where the pump is held within the handle bar and is not an extension where the technical advantage of implementing the brake function while maintaining the same dimension of the handle bar is not anticipated nor suggested by the Andrus '675 reference in view of the Modolo '649 reference. Claim 3 which depends on the independent claim 1 provides for the handle bar of a sprint rays type with two curved arms with the pump inside the two arms of the handle bar. Applicant notes that a person skilled in the art will recognize that a bike handle bar can either be directly connected to the steering stand (Figure 2, claim 3) or be connected to the stem through a lug (Figure 1, 1A, 1B, claim 2).

According to the embodiment of claim 2, the brake pump is contained within the lug with the advantage of avoiding the necessity of separate parts containing the pump (Andrus '675 reference), or the need of providing enlarged dimensions of the existing parts.

In this connection, it has to be noted that also Modolo '649 reference discloses an apparatus in which the brake pump contained inside a cavity provided in the handle grip (and not in the handle bar or in the lug) and protruding over the tube forming the handle bar (column 1, lines 47-53). Therefore, it is Applicant's position that claim 2 is not anticipated nor suggested by Andrus '675 reference in view of the Modolo '649 reference.

Claims 6, 7 and 8 depend on the independent claim 1 and also include the combination of features as highlighted in the independent claim 1. Therefore claims 6, 7 and 8 are not

anticipated nor suggested by the combination of references of Andrus '675 reference and the Modolo '649 reference.

Claim 9 has been rejected under 35 USC § 103(a) as being unpatentable over Andrus '675 reference in view of Leitner (U.S. Patent No. 5,632,362, "Leitner '362", hereinafter).

It is Applicant's position that the Andrus '675 reference in view of Leitner '362 reference fail to disclose and fail to suggest the present invention as claimed. Similar to the above analysis, claim 9 depends on the independent claim 1 and includes all the combination of features provided by claim 1. Leitner '362 reference discloses a disk braking assembly with a compact light weight braking arrangement in which hydraulic fluid is utilized to provide a greater braking power. Durability and reliability are achieved by use of a compensating chamber and piston having a compensating piston biasing member.

The rejection states that Andrus '675 reference lacks a specific showing of the piston-cable-lever connection and relies on the Leitner '362 reference to disclose the alternative connection at 26, 28 and 70, 72. However, neither of the references disclose the claimed apparatus providing the pump within the handle bar and not provided as an extension. Therefore, claim 9 is not anticipated nor suggested by the combination of references of the Andrus '675 reference and Leitner '362 reference.

Claim 10 has been rejected under 35 USC § 103(a) as being unpatentable over Andrus '675 reference in view of Leitner '362 reference and also in view of Lemarchand (U.S. 3,729,070, "Lemarchand '070", hereinafter) or the D'Aluisio (U.S. Patent No. 5,099,958, "D'Aluisio '958", hereinafter). Claim 10 depends on the independent claim 1 which discloses the pump held within the handle bar and not provided as an extension. The D'Aluisio '958

reference discloses a calibrator brake for a bicycle comprising a pair of pivot mounts one of which is mounted on a bicycle member laterally of a wheel rim, one on either side of the wheel, where the brake arm is pivotably mounted in a canty levered relation on each pivot mount adjacent it's lower end, and is biased away from the wheel rim and carries a brake shoe intermediate to it's ends. Lemarchand '070 discloses a manual release mechanism for an emergency and parking brake control system utilizing a fluid pressure operated spring cylinder with a transmission cable stretched between the piston contained in this cylinder and a brake control lever being guided by a sheath, the ends of such sheath taking anchor on a pair of stops respectively connected to stationary parts. The mechanism comprises two relatively slidable members, one connected to one of the stops, the other one connected to the adjacent stationary parts, these members being normally locked in the position of their maximum extension, the release of the emergency brake is obtained by releasing the locked members, thereby allowing the stop of the sheath to move to a position in which the tension of the cable is relieved.

The rejection states that one having ordinary skill in the art at the time of the invention would have found it obvious alternative equivalent means of actuating the piston assembly of Andrus '675 reference using a lever-cable connection as taught by Leitner '362 where the piston is pushed by the sheath. The Office Action also states that it is well known in the art to provide a reactive force of the sheath covering a cable to acuate certain brake elements and a person skilled in the art would have found it obvious to make use of the reactive force of the cable shift to acuate the piston simply as a part of an alternative equivalent brake actuating mechanism.

However, as Applicant noted above, claim 10 depends on claim 1 and provides for a

pump within the handle bar which includes a piston connected to a respective control lever through a relative cable held within in a sheath, where the cable being fixed to the body of the handle bar or to the part associated with the later, said piston being pushed by the sheath.

The combination of features not taught by the prior art provides several improved effects for the present invention as claimed. For instance, the present invention as claimed has the advantage of providing the unitary single part handle bar which is small in size.

Furthermore, Applicant finds not incentive in Lemarchand '070 reference in combination of D' Aluisio '958 reference to combine it with Leitner '362 reference and the Andrus '675 reference. Absent a teaching or a suggestion of the important feature of the invention, the combined references clearly do not direct the person of ordinary skill in the art toward the combination as claimed.

There must be some suggestion or teaching in the prior art as a whole which would lead the person of ordinary skill in the art to provide a combination as claimed. As the prior art as whole fails to direct the person of ordinary skill in the art toward the claimed combination, the invention should be considered not anticipated, non-obvious, and thus patentable.

Therefore, Applicant finds that the prior art reference as a whole including the Andrus '675 reference and Modolo '649 reference and Leitner '362 reference and D'Aluisio '958 reference and Lemarchand '070 reference do not anticipate the current invention and there is no suggestion or motivation to use the teachings of the references to provide a combination as claimed. As the prior art as a whole fails to suggest the combination of features as claimed, Applicant respectfully requests that the Examiner favorably consider the claims as now presented.

At this time, Applicant respectfully reconsideration of this application in view of the above amendments and remarks, and Applicant respectfully solicits allowance of this application.

It is Applicant's position that all claims are now allowable. Should the Examiner determine that issues remain that have not be resolved by this response, the Examiner is requested to contact Applicant's representative at the number given below.

Favorable action on the merits is respectfully requested.

Respectfully submitted  
for Applicant,

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Attached: (2) Replacement Sheets of Drawings

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